



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,388	02/13/2001	Daniel Keith Tomaschko	S63.2-9711	2245
490	7590	02/13/2006		
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			EXAMINER BUI, VY Q	
			ART UNIT 3731	PAPER NUMBER

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/781,388	<b>Applicant(s)</b> TOMASCHKO ET AL.	
	<b>Examiner</b> Vy Q. Bui	<b>Art Unit</b> 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 47-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/18/05</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

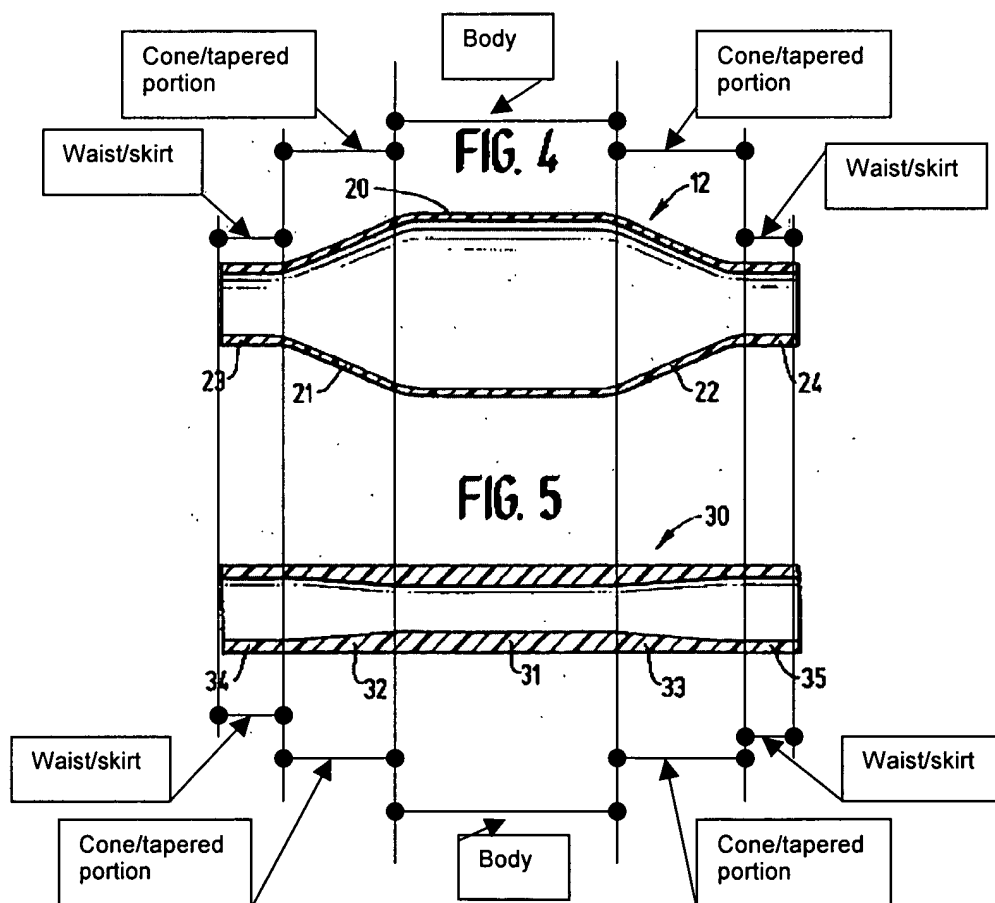
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 47-63 are rejected under 35 U.S.C. 103(a) as obvious over WAND et al.-

5,525,388 in view of Forman-5,826,588 or over Forman-5,826,588 in view of WAND et al.-

5,525,388.



Art Unit: 3731

As to claims 60 and 63, WAND (Figs. 4-5 above; column 2, lines 16-22) discloses balloon 12 having cone portions and body portion of a same wall thickness which has a variation less than 20% of a nominal or average wall thickness over substantially the entire length of the balloon. Since the wall thickness variation is about 20%, the cone wall thickness can be up to 20 % less than the body wall thickness. Balloon 12 has ground surfaces because the cone portions of balloon 12/parison 12 are thinned by machining, abrading or other suitable means (see WAND, col. 2, lines 45-53). Notice that removing material of a parison means removing the material of the balloon as well, because the parison and the balloon is essentially just one entity. It would have been obvious to one of ordinary skill in the art at the time of the invention to remove material of a parison/balloon so as to thin a portion of a parison/balloon to make the balloon to have a better profile for easy deployment in a patient body.

Alternatively, Forman-'588 (Figs. 5-7, 12, 14-15) discloses thinning a waist portion of balloon wall 62/97/98 by laser burning the outside surface of the balloon. It would be obvious to thin a balloon waist as shown in Fig. 15 of Forman-'588 by machining/abrading/grinding as taught by Wand-'388.

Claims 47-59, 61-62 and 65-67, WAND (claim 1) discloses thermoplastic balloon 12 and methods of thinning an end portion of the balloon such as machining, abrading or other suitable methods (col. 2, lines 47-53) substantially as recited in the claims. WAND does not explicitly disclose maintaining the temperature of the balloon below glass transition temperature or below highest glass transition temperature for the balloon's thermoplastic material. However, cooling a material at a cutting site with a coolant such as water/fluid/gas/air/oil is a well known process in machining the material with a machine tool such as a grinder/a lathe/a drill machine so as to maintain the cutting site at low temperature for an effective and accurate cutting and inherently, the temperature must be maintained below a glass transition temperature or below a highest

Art Unit: 3731

glass transition temperature for a thermoplastic material to avoid deformation or sticking of the material at the cutting site. It would have been obvious to one of ordinary skill in the art at the time of the invention to maintain the temperature of the cutting site of a thermoplastic material during a machining process below a glass transition temperature or below a highest glass transition temperature for a balloon thermoplastic material to avoid deformation or sticking of the material at the cutting site.

Alternatively, Forman-'588 discloses thinning a balloon wall by removing material on the outer surface of the balloon. It would have been obvious to one of ordinary skill in the art at the time of the invention to remove the outside material of the Forman-'588 balloon by machining or abrading/grinding as taught by Wand-'388 as this machining process is well known process to accurately remove material of an object.

As to claim 64, Wang et al.-5,556,383 discloses a copolymer made of a copolymer. It would have been obvious to one of ordinary skill in the art to make Wand-'388 or Forman-'588 balloon with a copolymer material as this material would be well known material suitable for making a medical balloon.

### ***Response to Arguments***

Applicant's assertion (Remarks, page 7, paragraph 4) that a cutting site can be provided with water/fluid/gas/air/oil for many reasons, such as for lubrication, to protect tooling, prevent warping, and to carry away removed material during machining can be considered as an evidence that this procedure is routine and conventional. This process is not novel.

Other applicant's arguments with respect to claims 47-63 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3731

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

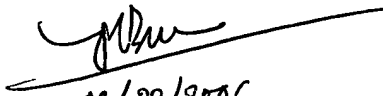
At least claims 47 and 51 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,3, 6, 12, 13 of U.S. Patent No. 6,193,738. Although the conflicting claims are not identical, they are not patentably distinct from each other because they includes same main elements of the invention such as removing/thinning a portion of a balloon by grinding or etching.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 571-272-4692. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan T. Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
02/02/2006  
Vy Q. Bui  
Primary Examiner  
Art Unit 3731